DETAILED ACTION

1. In response to the Office action mailed November 16, 2007 the Amendment has been filed on February 15, 2008.

Claims 1, 3, 21 and 22 have been amended.

Claims 1-10 and 12-22 are currently pending in this application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Steven L. Permut (Reg. No. 28,388) on May 12, 2008.

4. In the specification: Page 1, on line 2, before change the recitation "The present invention relates to an X-ray tube for high dose" to --This application is a 371 of PCT/CH03/00796 of December 2, 2003. The present invention relates to an X-ray tube for high dose --.

5. In claim 1, on line 12, change the recitation "second accelerator module" to --second acceleration module--.

Allowable Subject Matter

6. Claims 1-10 and 12-22 are allowed.

7. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowed because prior art fails to teach or make obvious an X-ray tube at least one acceleration module with a potential-carrying electrode, the acceleration module for acceleration of electrons being repeatedly connectible in series as often as desired, and the X-ray tube being of modular construction, the at least one acceleration module being interposed between the first and second acceleration module with the respective cathode and anode as claimed in combination with all of the remaining limitations of the claim.

Claim 1 is allowed because prior art fails to teach or make obvious an irradiation system comprising an X-ray tube comprising at least one further acceleration module with a potential-carrying electrode, interposed between a first and second acceleration modules with the respective cathode and anode the acceleration module for acceleration of electrons being repeatedly connectible in series as often as desired, and the X-ray tube being of modular construction, said at least one X-ray tube having a high voltage cascade for voltage supply of the X-ray tube as claimed in combination with all of the remaining limitations of the claim.

Claim 22 is allowed because prior art fails to teach or make obvious a method of production of an X-ray tube comprising: a multiplicity of mutually complementary

acceleration modules, each acceleration module comprising at least one potential-carrying electrode, a first acceleration module comprising the cathode with electron extraction, and a second acceleration module comprising the anode with the X ray generation, wherein the X-ray tube comprises at least one further acceleration module with a potential-carrying electrode, interposed between the first and second acceleration modules with the respective cathode and anode, the acceleration module for acceleration of electrons being repeatedly connectible in series as often as desired, and the X-ray tube being of modular construction; wherein: the X-ray tube is produced in a one-step vacuum soldering process as claimed in combination with all of the remaining limitations of the claim.

Claims 2-10, 12-20 are allowed by virtue of their dependence.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments, see pages 9-13, filed February 15, 2008, with respect to Claims 1-10 and 12-22 have been fully considered and are persuasive. The rejection of claims 1, 2 and 14-22 and objection of claims 3-10 and 13 have been withdrawn.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rose (US Patent 3,903,424) teaches the annular insulators for supporting successive annular electrodes in a linear accelerator have embedded X-ray absorbing shield structures extending around the accelerating path.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IRAKLI KIKNADZE whose telephone number is (571)272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Irakli Kiknadze/
Irakli Kiknadze
Primary Examiner
Art Unit 2882

/I. K,/ May 11, 2008